

Shawnee County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/11/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 29 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Shawnee County economy.¹

These 29 sectors have a total direct output of approximately **\$2.28 billion** and support **4778 jobs** in Shawnee County. Running the model for all 29 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Shawnee County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	4778.4	3.99%	\$562,780,974	5.36%	\$2,275,041,705	21.66%
Indirect Effect	3040.0	2.54%	\$324,740,265	3.09%	\$534,288,698	5.09%
Induced Effect	2168.2	1.81%	\$172,704,008	1.64%	\$289,056,367	2.75%
Total Effect	9986.5	8.35%	\$1,060,225,246	10.09%	\$3,098,386,770	29.50%

As shown in the above table, agriculture, food, and food processing sectors support **9,987 jobs**, or **8.35%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$3.10 billion**, roughly **29.50% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 29 agriculture, food, and food processing sectors is approximately **\$1.06 billion**, or **10.09% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **10.09% of the total economy**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the all other food manufacturing sector is the top employer with **1,167 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Shawnee County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
All other food manufacturing	1,167.3	\$401,073,447
Wholesale trade	690.0	\$173,982,182
Other snack food manufacturing	673.3	\$395,619,620
Dog and cat food manufacturing	563.2	\$911,185,803
Landscape and horticultural services	533.8	\$37,311,917
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	305.2	\$21,392,243
Bread and bakery product, except frozen, manufacturing	301.2	\$41,584,835
Veterinary services	288.4	\$34,528,124
Management of companies and enterprises	247.3	\$69,863,509
Truck transportation	236.7	\$39,500,999

The dog and cat food manufacturing sector directly contributes approximately **\$911.2 million** to the Shawnee County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Dog and cat food manufacturing	563.2	\$911,185,803
All other food manufacturing	1,167.3	\$401,073,447
Other snack food manufacturing	673.3	\$395,619,620
Wholesale trade	690.0	\$173,982,182
Chocolate and confectionery manufacturing from cacao beans	185.9	\$128,299,835
Animal, except poultry, slaughtering	164.2	\$116,933,108
Management of companies and enterprises	247.3	\$69,863,509
Other animal food manufacturing	36.8	\$53,705,834
Bread and bakery product, except frozen, manufacturing	301.2	\$41,584,835
Truck transportation	236.7	\$39,500,999

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Shawnee County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	36.2	\$23,441,114.82
Grain farming	95.3	\$21,518,740.06
Vegetable and melon farming	0.9	\$187,313.07
Fruit farming	2.0	\$194,394.35
Tree nut farming	0.0	\$17.70
Greenhouse, nursery, and floriculture production	21.5	\$3,569,714.37
All other crop farming	164.1	\$7,737,290.51
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	305.2	\$21,392,243.42
Poultry and egg production	0.4	\$305,539.35
Animal production, except cattle and poultry and eggs	29.9	\$2,448,781.37
Commercial logging	2.2	\$95,838.02
Commercial hunting and trapping	4.4	\$89,988.99
Dog and cat food manufacturing	563.2	\$911,185,803.16
Other animal food manufacturing	36.8	\$53,705,834.15
Chocolate and confectionery manufacturing from cacao beans	185.9	\$128,299,834.77
Confectionery manufacturing from purchased chocolate	24.1	\$8,248,394.94
Animal, except poultry, slaughtering	164.2	\$116,933,107.55
Bread and bakery product, except frozen, manufacturing	301.2	\$41,584,834.73
Frozen cakes and other pastries manufacturing	7.5	\$1,197,125.07
Other snack food manufacturing	673.3	\$395,619,620.28
Coffee and tea manufacturing	29.9	\$17,672,085.79
All other food manufacturing	1167.3	\$401,073,447.49
Breweries	15.0	\$7,538,240.03
Wineries	5.1	\$1,378,995.22
Farm machinery and equipment manufacturing	18.2	\$9,523,686.20
Food product machinery manufacturing	19.4	\$6,048,240.71
All other industrial machinery manufacturing	83.1	\$22,211,437.39
Veterinary services	288.4	\$34,528,123.62
Landscape and horticultural services	533.8	\$37,311,917.38

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Shawnee County, the retail sector was omitted.